

Notice of Allowability

Application No.

10/038,848

Examiner

Xu Mei

Applicant(s)

NG ET AL.

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 12/31/2001.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ The drawings filed on 31 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 2001/12/31
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cini et al, Yong et al, Nebuloni et al (US-5,420,535, 5,703,528), Tran (US-5,768,601, 5,818,299), Hewitt et al are made of record here as pertinent art to the claimed invention.

Cini et al discloses an apparatus and method for muting an output signal in a switching amplifier for disabling output power amplifiers and control signal levels at various positions in the power amplifier to reduce transient conditions.

Yong et al discloses a muting circuit for eliminating transient signals generated due to power supply turn-on and turn-off.

Nebuloni et al discloses audio amplifier turn-off control circuit including transistor for controlling voltage following of a filter capacitor to eliminates undesired popping noise.

Tran discloses apparatus for eliminating audio noise with regard to power management of a computer system.

Hewitt et al discloses a digital method to eliminates power-on pops and clicks noise in a PC audio system.

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2. The following is an Examiner's Statement of Reasons for Allowance:

The prior art fails to disclose or suggest an audio amplifier and method for reducing noise in an output audio signal during power-off of an audio amplifier that including a power supply having an output for providing a supply voltage; the output of the power supply providing a divided supply voltage; an audio amplifier having a supply voltage rejection circuit and including a first input for receiving input audio signal, a second input for receiving the a third input for receiving voltage signal for the supply voltage rejection circuit, and output for providing an output audio signal; and a speaker connected the output of the audio amplifier; and a power-off noise suppression circuit having first input receiving the divided supply voltage and an output for providing the supply voltage rejection signal, said power-off noise suppression rejection signal equal the divided supply voltage during power-off of the power supply that a rate of decrease of the supply voltage greater than a rate of decrease the supply voltage rejection in the output audio signal for reducing noise during power-off as substantially recited and construed in independent claims 1, 11, and 22. The cited prior arts above disclose various apparatus or devices or circuits having different popping noise rejection circuits for controlling different audio

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amplifiers during power-off, but fail to suggest the instant claimed invention.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 703-308-6610. The examiner can normally be reached on Monday-Friday (9:30-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Xu Mei
Primary Examiner
Art Unit 2644
12/03/2004